

CLAIMS

1. An apparatus, comprising:
at least one sensor to monitor at least one detectable condition;
5 at least one output device to provide at least one perceivable condition; and
at least one controller configured to control the at least one output device based at
least in part on the at least one detectable condition.
2. The apparatus of claim 1, wherein the apparatus is configured as a toy.
- 10 3. The apparatus of claim 1, wherein the at least one detectable condition is related
to one of a motion and an impact associated with the apparatus, and wherein the at least
one sensor is configured to monitor at least one parameter associated with the at least one
of the motion and the impact.
- 15 4. The apparatus of claim 3, wherein the at least one perceivable condition is related
to one of a lighting effect and a sound effect, and wherein the at least one output device
includes at least one of at least one light source and at least one sound generator.
- 20 5. The apparatus of claim 4, wherein the at least one output device includes the at
least one light source and the at least one sound generator.
6. The apparatus of claim 5, wherein the at least one light source includes at least
one LED-based light source.
- 25 7. The apparatus of claim 6, wherein the apparatus is configured as a toy.
8. A method for enhancing interactivity with a toy or consumer product, comprising
acts of:
30 A) monitoring at least one detectable condition associated with the toy or
consumer product;

B) providing at least one perceivable condition from the toy or consumer product;
and

C) controlling the at least one perceivable condition based at least in part on the
at least one detectable condition.

5

9. The method of claim 8, wherein the at least one detectable condition is related to
one of a motion and an impact associated with the toy or consumer product, and wherein
the act A) includes an act of:

monitoring at least one parameter associated with the at least one of the motion
and the impact.

10

10. The method of claim 9, wherein the at least one perceivable condition is related
to one of a lighting effect and a sound effect, and wherein the act C) includes an act of:
controlling at least one of the lighting effect and the sound effect based at least in

15

part on the at least one detectable condition.

11. The method of claim 10, wherein the act C) includes an act of:

controlling both the lighting effect and the sound effect based at least in part on
the at least one detectable condition.

20

12. The method of claim 11, wherein the act B) includes an act of generating at least
one lighting effect using at least one LED-based light source.

13. A toy, comprising:

25

at least one LED-based light source configured to provide multicolored
illumination;

at least one sound generating device; and

at least one controller configured to control the at least one LED-based light
source and the at least one sound generating device to provide at least one coordinated
sound and lighting effect.

30

14. The toy of claim 13, further comprising at least one sensor to monitor at least one detectable condition, wherein the at least one controller is configured to control the at least one LED-based light source and the at least one sound generating device based at least in part on the at least one detectable condition.